

1           2.       (amended) The read/write amplifier as claimed in claim 1, wherein the amplifier  
2       components have at least one N latch circuit for amplifying a voltage signal to a low level and/or  
3       at least one P latch circuit for amplifying a voltage signal to a high level and/or at least one  
4       equalizer for producing a reference voltage value on the bit line(s) and the reference bit line(s)  
5       and/or at least one bit switch for connecting at least one selected bit line pair to at least one  
6       external data line.

1           3.       (amended) The read/write amplifier as claimed in claim 2, wherein at least one N  
2       latch circuit and at least one P latch circuit are provided in the first read/write amplifier element.

1           4.       (amended) The read/write amplifier as claimed in claim 2, wherein at least one  
2       equalizer is provided in the first read/write amplifier element.

1           5.       (amended) The read/write amplifier as claimed in claim 2, wherein at least one N  
2       latch circuit is provided in the second read/write amplifier element.

1           6.       (amended) The read/write amplifier as claimed in claim 2, wherein at least one bit  
2       switch is provided in the second read/write amplifier element.

1           7.       (amended) The read/write amplifier as claimed in claim 1, wherein the second  
2       read/write amplifier element is connected or can be connected to at least one external data line.

1           8.       (amended) The read/write amplifier as claimed in claim 1, wherein the second  
2       read/write amplifier element is connected or can be connected to at least one further read/write  
3       amplifier.

1           9.       (amended) The read/write amplifier as claimed in claim 1, wherein the first and/or  
2       second read/write amplifier element(s) has/have one or more transistors for changing over  
3       between different bit lines and reference bit lines, respectively.

1           10.      (amended) A DRAM memory, having a number of DRAM memory cells, which  
2       each form one or more memory cell arrays, each memory cell being connected to a bit line and  
3       the bit lines furthermore being connected to at least one read/write amplifier, wherein the at least  
4       one read/write amplifier is designed as a read/write amplifier as claimed in claim 1.

1           11.      (amended) The DRAM memory as claimed in claim 10, wherein at least one word  
2       line is provided, which is routed across the memory cell array(s) and, for activation of the  
3       DRAM memory cells, is connected to one or more memory cell(s).

1           12.      (amended) The DRAM memory as claimed in claim 10, wherein a plurality of bit  
2       lines of a memory cell array are connected to a read/write amplifier.

1           13.      (amended) The DRAM memory as claimed in claim 10, wherein in each case a bit  
2       line of a DRAM memory cell that is to be evaluated and a reference bit line of a DRAM memory  
3       cell that is not to be evaluated form a bit line pair, and in that each bit line pair is connected both  
4       to the first and to the second read/write amplifier element.

1           14.      (amended) The DRAM memory as claimed in claim 10, wherein the connection  
2       of a bit line and/or reference bit line to a read/write amplifier is activated or can be activated via  
3       one or more transistors.

1           15.     (amended) A method for evaluating DRAM memory cells of a DRAM memory,  
2     in particular of a DRAM memory as claimed in claim 10, and in particular using a read/write  
3     amplifier as claimed in claim 1, having the following steps:

4           a) activation of one or more memory cells that are to be evaluated via at least one word  
5     line;

6           b) activation of a connection of at least one first bit line pair, formed from a bit line of the  
7     memory cell that is to be evaluated and a reference bit line of a memory cell that is not to be  
8     evaluated, to a first read/write amplifier element, and activation of the connection of at least one  
9     second bit line pair, adjacent to the first bit line pair, to a second read/write amplifier element,  
10    the two bit line pairs in each case being connected to the first and second read/write amplifier  
11    elements;

12          c) amplification of the voltage signals read out via the first bit line pair by means of at  
13    least one N latch circuit provided in the first read/write amplifier element and also a P latch  
14    circuit, and amplification of the voltage signals read out via the second bit line pair by means of  
15    at least one N latch circuit provided in the second read/write amplifier element;

16          d) evaluation and writing back of the data of the memory cell(s) that is/are to be  
17    evaluated and is/are actively connected to the first read/write amplifier element;

18          e) changeover of the connection between the bit line pairs and the first read/write  
19    amplifier element in such a way that the P latch circuit of the first read/write amplifier element is  
20    changed over to the second read/write amplifier element;

21          f) evaluation and writing back of the data of the memory cell(s) that is/are to be evaluated  
22    and is/are actively connected to the second read/write amplifier element; and

23          g) deactivation of the memory cells that are to be evaluated.

1           17.     (amended) The method as claimed in claim 15, wherein the bit line pair which is  
2     actively connected to the first read/write amplifier element is disconnected from the first

1 read/write amplifier element after the end of step d), with the result that the bit line and the  
2 reference bit line float with full voltage levels, and in that the N latch circuit of the first  
3 read/write amplifier element is subsequently switched off.

1 18. (amended) The method as claimed in claim 15, wherein, after the activation of a  
2 bit switch provided in the second read/write amplifier element, a voltage difference is generated  
3 on one or more external data line(s) connected to said bit switch.

1 19. (amended) The method as claimed in claim 15, wherein, after the end of the  
2 evaluation operation, the uniform reference voltage is applied to all the bit lines of the evaluated  
3 memory cells via an equalizer.